

A P P L I C A T I O N

F O R

UNITED STATES OF AMERICA

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S P E C I F I C A T I O N

TO ALL WHOM IT MAY CONCERN:

Be it known that I,

Lino BERGAMELLI, Italian citizen,  
of BAGNATICA - ITALY

have invented certain improvements in

“BRA WITH CLOSURE MEANS”

of which the following description in connection with the accompanying drawings is a specification, like reference characters on the drawings indicating like parts in the several figures.

## BACKGROUND OF THE INVENTION

The present invention relates to a bra with improved closure means.

As is known, various types of bra are currently commercially available which have closures usually obtained by means of hook-and-eye clasps or  
5 by means of interlocking hooks of the most disparate types.

These kinds of closure, despite being widely used, generally suffer the drawback of not allowing to close the bra simply and quickly, requiring the execution of specific operations both to close it and to open it.

## SUMMARY OF THE INVENTION

10 The aim of the invention is to solve the problem above described by providing a bra with improved closure means that allows to achieve a substantially "automatic" closure without requiring particular actions of any kind.

Within this aim, an object of the present invention is to provide a bra in  
15 which the closure is particularly practical and versatile and at the same time allows very easy opening.

A further object of the present invention is to provide a bra with improved closure means that thanks to its particular constructive characteristics is capable of giving the greatest assurances of reliability and  
20 safety in use.

A still further object of the present invention is to provide a bra with improved closure means that can be obtained easily starting from commonly commercially available elements and materials and is also competitive from a merely economical standpoint.

25 This aim and these and other objects that will become better apparent hereinafter are achieved by a bra with improved closure means, according to the invention, comprising two cups that are connected to back portions of the bra and a front or rear bra closure element, characterized in that said closure element is constituted by a closure of the magnetic type.

## BRIEF DESCRIPTION OF THE DRAWINGS

Further characteristics and advantages will become better apparent from the detailed description of a bra with improved closure means, illustrated by way of non-limitative example in the accompanying drawings, wherein:

Figure 1 is a schematic view of the bra closure element in the open position;

Figure 2 is a front view of the closure element in the closed position;

Figure 3 is a rear view of the closure element;

Figure 4 is a sectional view, taken along the line IV-IV of Figure 2;

Figure 5 is a top view of the closure element;

Figure 6 is a view of the bra worn with rear closure;

Figure 7 is a perspective view of the closure element;

Figure 8 is a perspective view of the closure element during opening;

Figure 9 is a view of the closure element in the open position.

#### DESCRIPTION OF THE PREFERRED EMBODIMENTS

With reference to the figures, the bra with improved closure means, generally designated by the reference numeral 1, typically comprises two cups 2, which are connected to the back portions 3.

The bra can have a rear closure with a closure element, generally designated by the reference numeral 4, that is arranged on back portions 3, or optionally the closure element can be arranged at the front between the two cups.

The particularity of the invention is constituted by the fact that the closure element is of the magnetic type, and in a preferred embodiment such closure element 4 comprises a first body 10 and a second body 12, both of which are flat and plate-shaped and form, at one end, a slot 13 for connection to the back portion 3 or to the cups in the case of a closure element arranged at the front.

The first plate-shaped body 10 is provided laterally with two recesses 14, which are arranged so as to correspond to two tabs 15 formed by the second body which are capable of providing a mechanical traction-based coupling.

The particularity of the invention is constituted by the fact that magnetic means are located on one of the bodies and a ferromagnetic portion is provided correspondingly on the other body; optionally, as shown in the figures, it is possible to provide disk-shaped permanent magnets 20 with mutually opposite polarities, which are fitted flush on the mating faces of the body 10 and of the body 11, so as to obtain mutual attraction.

The plate-shaped bodies are substantially flat and in order to avoid causing discomfort they are made of a material that is free from nickel and accordingly free from allergy-inducing components.

10 The materials used allow good resistance to washes without any damage.

With the described arrangement, it is sufficient to move the body 10 and the body 12 mutually closer in order to achieve immediate attraction of the two permanent magnets, which are arranged with mutually opposite polarities so as to achieve mating of the two parts, which at the same time also perform a coupling of the mechanical type by engagement of the tabs 15 with the recesses 14.

In order to perform disengagement, it is sufficient to apply a slight pressure to the end of the element that is arranged at the rear, so as to produce a rotation that moves apart the two magnets and consequently disengages the tabs 15 from the recesses 14.

From the above description it is evident that the invention achieves the intended aim and objects, and in particular the fact is stressed that a particularly practical and functional closure is provided which allows to perform closure and opening rapidly and simply, while at the same time having the assurance of an engagement that is always optimum, since it remains closed even if it is subjected to the natural pressures and stresses of the body in motion.

Furthermore, the particular shape without edges prevents the closure from causing any discomfort to the wearer of the bra.

30 In practice, the materials used, so long as they are compatible with the

specific use, as well as the contingent shapes and dimensions, may be any according to requirements.

The disclosures in Italian Utility Model Application No. MI2003U000285 from which this application claims priority are incorporated herein by  
5 reference.